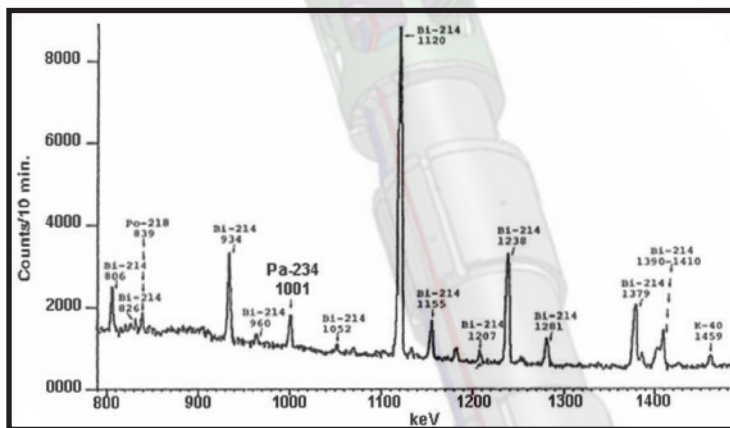


URANIUM SPECTRAL ANALYSIS



HALT GUESSWORK WITH USAT URANIUM SPECTRAL ANALYSIS TOOL

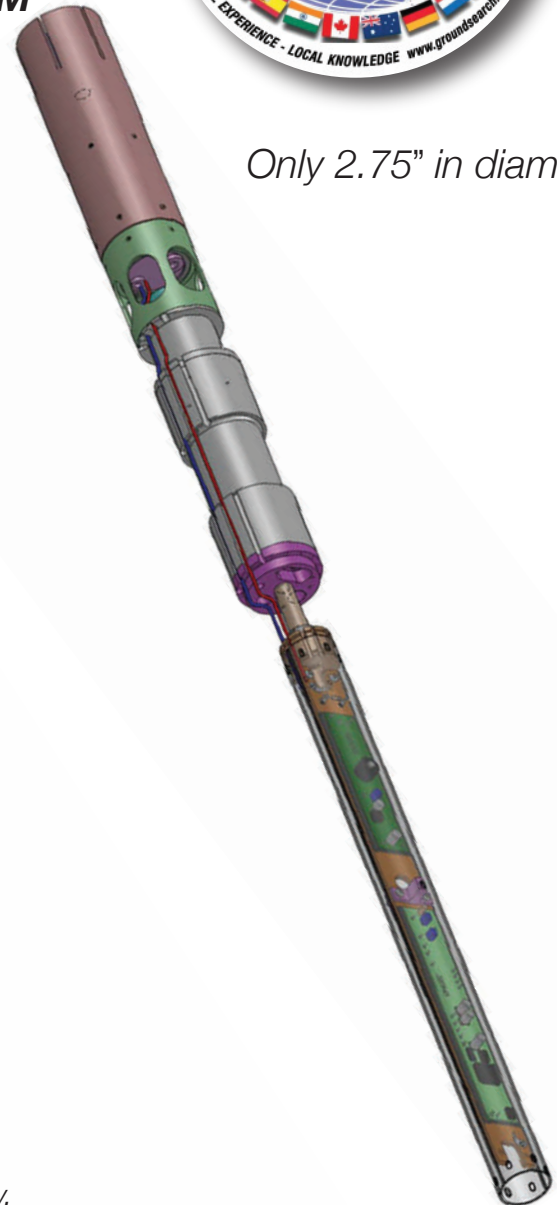
USAT is Groundsearch's new logging tool for uranium exploration which directly measures uranium in disequilibrium conditions. USAT employs a High-Purity Germanium detector that measures **Protactinium 234**, the second daughter element after Uranium 238. USAT ignores the high-volume gamma rays of **Bismuth 214**, **Lead 214**, and **Radium 226** isotopes.



USAT IS MORE EFFECTIVE THAN CORE ANALYSIS

- USAT samples roughly 30 cm (about 1 ft) into the formation around the tool. Core analysis only supplies data on one core width.
- USAT logs detect and outline directional trends.
- USAT data are not corrupted by washouts in high porosity sands. Its operation is not affected by varying porosity.
- Avoids the problems of missing sections and mislabeled cores.
- USAT logging is highly cost effective.

Only 2.75" in diameter!



NON NUCLEAR

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URANIUM SPECTRAL ANALYSIS



USAT OFFERS THESE ADVANTAGES

SAFETY: USAT does not require a radioactive generator nor source!

ACCURACY: USAT requires dramatically less or no correction for borehole diameter, drilling mud conductivity, shale content, formation porosity, and formation water salinity variations. The larger the correction required the greater the possibility for error.

RELIABILITY: USAT requires low current/low voltage with solid state electronics in a passive tool utilizing a high technology intrinsic germanium detector.

CHARACTERISATION: USAT does not require expensive customised calibration pits for grade determinations. USAT can be calibrated at the Adelaide uranium test pits. Once calibrated, the only environmental correction is a small one for hole size.

CALIBRATION CHECKS: USAT calibrations can be checked in the wireline truck using a low cost uranium core calibration check sleeve.

PVC CASING: USAT can determine grade through PVC casing with a small PVC correction.

SURVEY SPEED: While USAT is 30% slower than PFN depending on grade thickness, it compensates with safety, accuracy and reliability.

DIRECT MEASUREMENT: While PFN measures uranium directly, USAT measures protactinium, an immediate daughter element of uranium

USAT OVER PFN

SAFETY: PFN neutron generator will produce significant exposure to operators if fired above ground.

ACCURACY: PFN requires multiple corrections resulting in higher error probability.

RELIABILITY: PFN uses inherently less reliable high current/ high voltage power supplies in an active tool utilizing a highly complex neutron generator and neutron detector system.

CALIBRATION: PFN requires complex calibration and cannot be calibrated in the field.

PVC CASING: PVC absorbs the majority of neutrons from the PFN neutron generator.

